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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,368	10/10/2002	Brian Kaczmarek	201-1510	1003

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EXAMINER

CHANG, CHING

ART UNIT PAPER NUMBER

3748

DATE MAILED: 12/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/065,368

Applicant(s)

KACZMAREK ET AL.

Examiner

Ching Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-19, 21, 24, 26-27 is/are rejected.
- 7) ☒ Claim(s) 20, 22, 23 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:  
- " cam cover 202 " in Paragraph [0028] appears to be -- cam cover 200 --.  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. ***Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mathews et al. (US Patent No. 5,035,637).***

Regarding claims 1-2, Mathews discloses a valve cover gasket (See Figs 2-11) comprising: a generally compliant first material (10, 98) having an upper surface for contact with a cover (27) and a lower surface for contact with an engine head (28); a generally rigid bracket frame of a second material (19; 20; 82) connected with said first material; and a solenoid actuator (a injector through connectors 104, 86, and 100) connected with said second material, wherein said first material is a polymeric material and said second material is a metal.

Regarding claims 3-4, Mathews further discloses the said first material (10) includes a first polymeric material (10) and a second polymeric material (98), wherein said second polymeric material is an elastomeric material.

Regarding claims 5-6, Mathews further discloses the said gasket encapsulates wiring (25, 26; wiring through opening 34) utilized to power said solenoid actuator,

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wherein said gasket has an external terminal for connection with an electrical connector (40; 84).

With regard to the 103 section (a) rejection, Mathews further discloses " Although the various embodiments of the valve cover gasket assembly....., it is to be understood that the concepts disclosed herein are applicable to gasoline engines as well " (See Col. 5, line 54 through line 58). Therefore, it would have been obvious to one having ordinary skill in the art to apply the same teaching from Mathews reference, to a cam cover gasket for a gasoline engine which has a overhead camshaft valve train configuration, too.

**5. Claims 1-2, 5-6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morris (US Patent No. 6,609,487), and further in view of Mathews et al. (US Patent No. 5,035,637).**

Morris discloses a valve cover gasket (2) comprising: a generally compliant first material (See Col. 2, line 41 through line 52) having an upper surface for contact with a cover (14) and a lower surface for contact with an engine head (16); a generally rigid bracket frame (6) of a second material connected with said first material; and a solenoid actuator connected with said second material (through a EUI solenoid connector 12), wherein said first material is a polymeric material and said second material is a metal; wherein said gasket encapsulates wiring (6) utilized to power said solenoid actuator, wherein said gasket has an external terminal for connection with an electrical connector (12).

With regard to the 103 section (a) rejection, the patent Mathews discloses “ Although the various embodiments of the valve cover gasket assembly....., it is to be understood that the concepts disclosed herein are applicable to gasoline engines as well “ (See Col. 5, line 54 through line 58). Therefore, it would have been obvious to one having ordinary skill in the art to apply the same teaching from Mathews reference, to a cam cover gasket for a gasoline engine which has a overhead camshaft valve train configuration in a Morris device too.

6. ***Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris (as applied to claim 1 above) in view of Hendriksma et al (US Patent No. 6,499,451).***

Morris discloses the invention, however, fails to disclose the said gasket being connected with a plurality of solenoid actuators to control a plurality of rocker arms.

The patent to Hendriksma on the other hand, teaches that it is conventional in the art of control system for variable activation of intake valve, to utilize a plurality of electrical components of assembly 40' located outside a camshaft cover 56 to control a plurality of cam finger follower 12'.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the control relationship between the electrical components assembly and the cam finger follower taught by Hendriksma in the Morris device, since the use thereof would provide an improved cam cover gasket as a bridge between the solenoids and the rocker arms.

**7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathews (as applied to claim 1 above) in view of Hendriksma et al (US Patent No. 6,499,451).**

Mathews discloses the invention, however, fails to disclose the said gasket being connected with a plurality of solenoid actuators to control a plurality of rocker arms.

The patent to Hendriksma on the other hand, teaches that it is conventional in the art of control system for variable activation of intake valve, to utilize a plurality of electrical components of assembly 40' located outside a camshaft cover 56 to control a plurality of cam finger follower 12'.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the control relationship between the electrical components assembly and the cam finger follower taught by Hendriksma in the Mathews device, since the use thereof would provide an improved cam cover gasket as a bridge between the solenoids and the rocker arms.

**8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mathews (as applied to claim 1 above) in view of Payne et al (US Patent No. 6,439,176).**

Mathews discloses the invention as recited above, however, fails to disclose the said bracket frame including a bracket support connected to support the said solenoid actuator.

The patent to Payne on the other hand, teaches that it is conventional in the art of control system for deactivation of valves, to utilize a connector/retainer 84 being connected to a gasket plate 44 to hold solenoids 30.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the retainer being connected with the gasket to hold the solenoids as taught by Payne in the Mathews device, since the use thereof would provide an improved cam cover gasket connected with a retainer to hold solenoids.

9. ***Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris (as applied to claim 1 above) in view of Payne et al (US Patent No. 6,439,176).***

Morris discloses the invention as recited above, however, fails to disclose the said bracket frame including a bracket support connected to support the said solenoid actuator.

The patent to Payne on the other hand, teaches that it is conventional in the art of control system for deactivation of valves, to utilize a connector/retainer 84 being connected to a gasket plate 44 to hold solenoids 30.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the retainer being connected with the gasket to hold the solenoids as taught by Payne in the Morris device, since the use thereof would provide an improved cam cover gasket connected with a retainer to hold solenoids.



10. ***Claims 10, 16-17, 18, 21, 24, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over lizuka et al. (US Patent No. 6,615,796) in view of Hendriksma et al. (US Patent No. 6,499,451), and further in view of Mathews et al. (US Patent No. 5,035,637).***

lizuka discloses an internal combustion engine and a method of assembling a portion of it, comprising: a plurality of combustion chambers (29A to 29D); a head (22) with a plurality of respective passageways (40, 41) fluidly connected with said combustion chambers (See Figs. 1-6); a plurality of valves (47, 48) controlling fluid communication between said respective passageways and said chambers; a plurality of respective rocker arms (59, 60) for activating said valves, said rocker arms having first and second modes of operation of said valves; a cover (23) enclosing said rocker arms having a surface for mating with said head; a gasket (25) captured between said cover mating surface and said head.

lizuka discloses the invention, however, fails to disclose a plurality of solenoid actuators being activated respective rocker arms between a first and a second modes of operation.

The patent to Hendriksma on the other hand, teaches that it is conventional in the art of control system for variable activation of intake valves, to utilize solenoid actuators 40' to activate respective cam finger followers 12'.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized solenoids as taught by Hendriksma in the lizuka

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device, since the use thereof would provide an improved engine with solenoids actuated valve trains.

The modified lizuka device recites the invention above, however, fails to disclosed the said gasket being fabricated from a generally soft material and a generally rigid material providing a bracket frame and said gasket encapsulating power supply wiring to power the said solenoids.

The patent to Mathews on the other hand, teaches that it is conventional in the art of engine valve cover gasket, to utilize a gasket (10) being fabricated from a generally soft material (10, 12, 98) and a generally rigid material providing a bracket frame (19; 20; 82) and said gasket encapsulating power supply wiring (25, 26) to power the said solenoid actuators, wherein said soft material is a polymeric material and said rigid material is a metal, wherein said soft material includes a first polymeric material (10) and a second polymeric material (98), wherein said second polymeric material is an elastomeric material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the gasket as taught by Mathews in the modified lizuka device, since the use thereof would provide an improved gasket to empower the variable valve actuation system of an engine.

**11. Claims 11-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over lizuka in view of Hendriksma, further in view of Mathews et al.**

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***(as applied to claim 10 above), and further in view of Payne et al. (US Patent no. 6,439,176).***

The modified lizuka device discloses the invention, however, fails to disclose the said bracket frame further including bracket supports connected with said frame for supporting said solenoid.

The patent to Payne on the other hand, teaches that it is conventional in the art of control system for deactivation of valves, to utilize a connector/retainer 84 being connected to a gasket plate 44 to hold solenoids 30.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the retainer being connected with the gasket to hold the solenoids as taught by Payne in the modified lizuka device, since the use thereof would provide an engine with an improved cam cover gasket connected with a solenoid retainer.

***Allowable Subject Matter***

12. Claim 9 is allowed.

13. Claims 20, 22-23, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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**Conclusion**

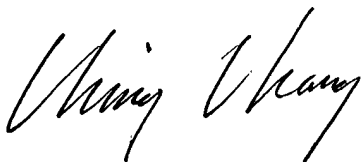
14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is (703)306-3478. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703)308-2623. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and (703)872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1148.

Patent Examiner



Ching Chang  
December 8, 2003



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700